"RETRENCHMENT RE-VISITED: STATE AND CAMPUS POLICIES IN TIMES OF FISCAL UNCERTAINTY"

by:

Brian E. Noland, Tennessee Higher Education Commission and

Houston D. Davis, Austin Peay State University

Presented to the 43rd Annual AIR Conference May 18-21, 2003 Tampa, Florida

"RETRENCHMENT RE-VISITED: S TATE AND CAMPUS POLICIES IN TIMES OF FISCAL UNCERTAINTY"

INTRODUCTION

The coming decade for higher education in the United States is one of unprecedented opportunity coupled with significant leadership, policy, and fiscal challenges. The decade of prosperity of the 1990's has passed and been replaced by fiscal uncertainty that parallels the "doom and gloom" era of the early 1980's. The ability of higher education to rise to the challenge of maintaining academic quality while promoting student access will directly impact the future of countless generations of students.

Higher education has experienced dramatic and exponential growth in the post-war era. From the influx of students precipitated by the GI Bill in the 1950's, to the awakening of colleges and universities in the 1960's as a result of the baby boom enrollment increase, American higher education has experienced significant growth during the expansion era of the later half of the 20th century. The decade of the 1970's witnessed the emergence and rapid expansion of the community college sector as states created colleges designed to bring access within the fiscal and geographic reach of most Americans. The goal of undiluted access was the dominant paradigm of higher education and unprecedented enrollment growth occurred across all levels and sectors of higher education. From medical schools and doctoral programs to urban and satellite campuses, the growth of academia during this period was significant (Bogue and Aper 2002).

During the 1980's the golden age of expansion dissipated as both enrollment declines and recession brought an onslaught of criticisms towards academia. By the 1990's, state systems of higher education had settled into maturity, and the full effect of cost containment and the changing locus of control was evidenced across higher education, causing a reexamination of structure, programs, and mission. This re-examination was often precipitated by energized governing and coordinating boards (Millette 1984) which were charged by political stakeholders to control the spiraling costs of higher education. The result of this increased oversight was a greater degree of fiction between these entities

and the institutions were created (McGuiness 1997). Accountability had become the dominant paradigm of educational/legislative relations.

Because of myriad environmental factors such as rising health care, K-12 education, and social services costs, American colleges and universities were are no longer able to sustain their former status as the "golden boys" of state legislatures. As Boyd (2003) notes, it will be extremely difficult for states to maintain historical funding levels for post-secondary education because of increasing Medicaid commitments and systemic decreases in state tax revenues. Additionally, states enacted a series of short-term tax abatements and raided reserve funds in the late 1990s, actions that further exacerbate their inability to fund higher education. As a result of these actions, state finances will be constrained tightly over the remainder of the decade even if the economy recovers from its present recessionary condition (Boyd 2003).

THEORETICAL FRAMEWORK

The recession of the early 2000's presents a series of challenges for higher education. Because of declining state appropriations, the immediate benefactors of academia, students and parents, have become responsible for funding much of the recent growth in American higher education. At the close of the 1970's, public colleges received three dollars in state support for every one-dollar that they raised in tuition revenue (NCES 2002). By the close of the 1990's, they received two dollars of tuition for every three dollars in direct state appropriations. The pursuit of student generated revenue now plays a significant role in shaping the mission and operating principles of higher education. While the pressure for access is boundless, states tax coffers have not been able to keep pace Gumport et al 1997; Hovey 1999; Boyd 2002; Boyd 2003). As a result, access has increasingly come with a significant and increasing sticker price.

During periods of economic downturn, higher education is one of the primary targets of state legislatures because of its perceived budgetary flexibility (Callan 2002; Conklin 2002). Because higher education is blessed and/or cursed by a variety of iniquities relative to other state entities, it has

historically absorbed a disproportionate share of budget cuts as state economic conditions fluctuate.

According to Callan (2002),

Relative to other state services and agencies, colleges and universities are seen as having fiscal and programmatic flexibility. Unlike other state agencies, many higher education institutions have separate budgets and reserves of their own. Campuses are also assumed to be able to absorb temporary fiscal adversity by translating budget cuts into payroll cuts, since many7 campuses are not bound by collective barraging agreements. Unlike state agencies whose programs have relative fixed spending levels (some set in statute. Others mandated by court decisions and federal requirements) colleges and universities can save money by increasing class size and changing course offerings, and even by reducing enrollments (pg. 4-5).

As a result of budget uncertainty and the propensity of higher education to translate funding shortcomings to students through ever-increasing tuition and fees, academia may now be at the tipping point (Concklin 2002). Consequently, retrenchment initiatives have once again become a significant issue for American colleges and universities.

From the 1970's forward there has been a considerable amount of scholarship on the dynamics surrounding the under-funding of higher education and the resulting retrenchment decisions that forced higher education to contract from its once broad scope and mission (Gove, 1971; Mingle, 1982; Cameron, 1983; Ashar & Shapiro, 1990; Raths, 1991; Wood & Valenzuela, 1996; Callan, 2002). Unstable state budgets precipitated a reduction in fiscal and political support for higher education that began in the middle 1980's and continued through the decade of the 1990's (Wood & Valenzuela, 1996; Callan, 2002). When examining the nexus between the state house and the campus, one must remain cognizant that higher education is merely one of many sectors of state government that compete for expendable state tax revenues. Increases in demand for public services, demographic changes, growing populations, income growth, income redistribution, and risk aversion have fueled the growth in state expenditures in the last thirty years (Bonser, McGregor, & Oster 1996).

The Link between Financial Conditions and Student Fees

One of the major themes of the past few decades has been the shifting of funding responsibilities from state appropriations to student generated tuition and fee revenue. The responsibility debate essentially differentiates into two polar positions: ¹ high state appropriations/low fees and ² low state

appropriations/high fees. Proponents of low appropriations/high fees contend that because of structural inadequacies in state revenue collection and distribution mechanisms, tuition increases are inevitable. Therefore, institutions and governing agencies should establish policies that lesson the impact of tuition increases on financially at-risk students. While this policy has achieved widespread support among a diversity of constituencies, it is fallacious because financial aid awards have not kept pace with tuition, and little policy forethought has gone into tuition increases. As noted by Gumpoert et. al. (1997) and Callan (2002), tuition increases are generally the result of financial and political expediency rather than the outcome in-depth and conceptually framed public discourse.

Proponents of high appropriation/low tuition policies contend that such strategies support society as a whole because of the benefits that accrue from an educated workforce. Low tuition advocates also note that public tuition is a form of taxation, and that middle income students in a high tuition environment bear a disproportionate share of the higher education funding burden. Because lower income students have available to them government subsidies and upper income students are better equipped to handle additional costs (Leslie and Brinkman 1988), a low tuition policy is often the preferred means to ensure access to post-secondary education. Finally, low tuition advocates note that high tuition policies channel middle income students to low quality institutions because "they are not able to afford the sticker prices at elite institutions" (Heller 1998: p. 19). It has been further documented that high tuition combined with a lack of available financial aid serves as a cooling out function for low income students by limiting many of these students to only two-year college options (Davis, Noland, and McDonald 2001).

According to Hauptman and Meritosis (1991) there are five general explanations for increasing tuition charges: ¹ colleges face increasing prices for the goods that they purchase; ² colleges are using tuition increases to finance improved services; ³ the share of revenue from sources other than tuition is declining; ⁴ the increased availability of aid and grant dollars have led colleges to increase costs; and ⁵ competitive pressures have convinced colleges to raise fees. Increased prices for higher education have outstripped prices for goods and services, as well as most inflation rates. Fee increases have also

Undergraduate Total Maintenance and Mandatory Fees For Academic Years 1994-95 Through 2002-03																			
			Percent		Percent		Percent		Percent			Percent		Percent		Percent		Percent	Percen Increas
	1994-95	1995-96	Increase 3.7%	1996-97	Increase 8.4%				Increase 8.4%	199		Increase		Increase 9.6%	2001-02	Increase 13.4%	2002-03		98-03
Austin Peay	\$1,860 1.690	\$1,928		\$2,090 1.928	2.7%	\$2,262	8.2%	\$2,452	13.5%	2	2,566	4.6% 6.2%	\$2,813	9.6%	\$3,190	13.4%	\$3,454	8.3%	52.7% 57.7%
East Tennessee Middle Tennessee	1,690	1,878	11.1%	2.012	2.5%	2,100 2.186	8.6%	2,384	8.7%		2,532	5.2%	2,759	11.6%	3,119	13.0%	3,311	6.2% 7.8%	56.7%
Middle 1 ennessee Tennessee State	1,774	1,962	2.7%	1.896	2.7%	2,186	10.7%	2,376	9.1%		2,500	5.9%	2,791	9.5%	2,987	12.7%	3,426	8.9%	55.0%
Tennessee State Tennessee Tech	1,798	1,846	2.7%	1,896	2.7%	2,098	10.7%	2,288	9.1%		2,422	4.9%	2,651	10.2%	3,066	15.0%	3,252	6.5%	54.35
University of Memphis	1,922	2,094	8.9%	2,180	4.1%	2,110	10.2%	2,500	9.0%		2,420	7.1%	3,087	9.5%	3,472	12.5%	3,704	6.7%	53.6%
oluveisity of Meniplus	1,700	2,004	0.370	2,100	4.174	2,712	10.070	2,030	3.070		2,010	2.170	3,007	2.374	3,472	12.370	3,704	0.770	33.07
Chattanoora	\$1.004	\$1.032	2.8%	\$1.068	3.5%	\$1,160	8.6%	\$1,254	8.1%	\$	1.322	5.4%	\$1,443	9.2%	\$1.637	13.4%	\$1,771	8.2%	52.75
Cleveland	1.002	1.030	2.8%	1.060	2.9%	1.142	7.7%	1.236	8.2%		1.304	5.5%	1.425	9.3%	1.625	14.0%	1.737	6.9%	52.15
Columbia	996	1.024	2.8%	1.054	2.9%	1.142	8.3%	1,236	8.2%		1.304	5.5%	1.425	9.3%	1.619	13.6%	1,731	6.9%	51.6%
Dversburz	1.002	1.030	2.8%	1,060	2.9%	1.142	7.7%	1,236	8.2%		1,304	5.5%	1,425	9.3%	1,619	13.6%	1,731	6.9%	51.6%
Jackson	1,002	1,030	2.8%	1,060	2.9%	1,142	7.7%	1,236	8.2%		1,304	5.5%	1,425	9.3%	1,619	13.6%	1,731	6.9%	51.69
Motlow	1,006	1,034	2.8%	1,064	2.9%	1,148	7.9%	1,240	8.0%		1,308	5.5%	1,429	9.3%	1,623	13.6%	1,735	6.9%	51.19
Nashville State Tech	982	1,010	2.9%	1,040	3.0%	1,144	10.0%	1,230	7.5%		1,298	5.5%	1,419	9.3%	1,613	13.7%	1,725	6.9%	50.85
Northeast	1,004	1,032	2.8%	1,062	2.9%	1,144	7.7%	1,238	8.2%		1,306	5.5%	1,445	10.6%	1,639	13.4%	1,751	6.8%	53.1%
Pellissippi	1,032	1,060	2.7%	1,090	2.8%	1,172	7.5%	1,266	8.0%		1,334	5.4%	1,455	9.1%	1,649	13.3%	1,761	6.8%	50.35
Roane	1,000	1,028	2.8%	1,058	2.9%	1,146	8.3%	1,240	8.2%		1,308	5.5%	1,429	9.3%	1,623	13.6%	1,745	7.5%	52.35
Shelby	982	1,010	2.9%	1,040	3.0%	1,142	9.8%	1,236	8.2%		1,304	5.5%	1,425	9.3%					
State Tech Memphis	996	1,024	2.8%	1,054	2.9%	1,136	7.8%	1,230	8.3%		1,298	5.5%	1,419	9.3%	1,619	13.6%	1,731		52.4%
Volunteer	982	1,010	2.9%	1,040	3.0%	1,142	9.8%	1,242	8.8%		1,310	5.5%	1,431	9.2%	1,625	14.5%	1,737	7.3%	52.1%
Walters	1,002	1,030	2.8%	1,060	2.9%	1,142	7.7%	1,240	8.6%		1,308	5.5%	1,429	9.3%	1,623	13.4%	1,735	6.8%	51.9%
UT Chattanoora	\$1.964	\$1.932	-1.6%	\$ 2.064	6.8%	\$ 2,200	6.6%	\$2,464	12.0%	\$	2.660	8.0%	\$2,834	6.5%	\$3,236	14.2%	\$3,550	9.7%	61.45
UT Knoxville	2,052	2,164	5.5%	2,236	3.3%	2,576	15.2%	2,744	6.5%		3,104	13.1%	3,662	18.0%	3,784	3.3%	4,056	7.2%	57.5%
UT Martin	2,030	1,958	-3.5%	2,014	2.9%	2,240	11.2%	2,342	4.6%		2,656	13.4%	2,830	6.6%	3,280	15.9%	3,498	6.6%	56.25
Technology Centers	\$ 324	\$ 412	27.2%	\$ 448	8.7%	\$ 860	92.0%	\$ 932	8.4%	\$	984	5.6%	\$1.081	9.9%	\$1,225	13.3%	\$1,309	6.9%	52.25

outstripped the growth in per capita income. For example, fee increases in 2001-02 in Tennessee (13%) were significantly higher than changes in the CPI (3.4%) and per capita income (4.4%). As noted in Losing Ground (Callan 2002), American higher education has reached a position where it can no longer look exclusively to student fees to offset declining state appropriations. Callan (2002) contends that higher education must instead look internally and contain costs to ensure that education remains affordable to the majority of the nation's citizenry. Unless corrective measures are taken, the dream of receiving a college degree may become unrealistic for the majority of Americans.

The impact of tuition increases on the middle class has been the focus of much discourse and public debate. The interests of the middle class play an important role in the political consideration of tuition increases. Jencks and Reisman (1971) posit that state legislators generally attend to the concerns of the middle class via state appropriations for higher education. Theoretically, taxpayers pay taxes rather than investing in college saving plans and consequently expect that public college tuition will be low. While this position was applicable during the 1970's, shifting tax structures and declining revenues have left state government and higher education with a single constant and reliable source of revenue, student fees (Boyd 2002).

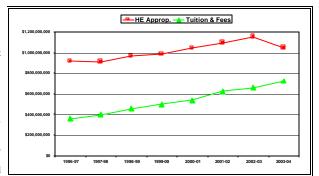
Although most states have attempted to create linkages between appropriations and aid, there is considerable slippage in these linkages because the underlying fiscal conditions for higher education have not been stable. The linkages between appropriations and students fees are evidenced in state funding policies that establish targets for the percentage of total operating costs derived from state appropriations versus student fees. While these indexes are generally adhered to during times of fiscal stability, they are increasingly difficult to maintain as states cope with recessionary trends and struggle to meet the rising fiscal needs of higher education. As Hearn and Longanecker (1985) note, index policies offer significant prospects for maintaining equity and efficiency, but often fail because of political wild cards. As state budgets have become increasingly complex as a result of the divestiture policies of Reagan, Bush, and Clinton, the context within which tuition decisions are made have become both financially and politically complex (Lenth 1993).

The Link between Fiscal Conditions and Retrenchment

The investment that federal, state, and local governments have made in American higher education is significant. Government agencies appropriate more than \$200 billion for higher education annually, yet they are investing a lower percentage of public funds on academia than 10 years ago, even though enrollments have increased significantly. Clearly, states are paying a smaller share and students

are absorbing more of their educational expenses. The following chart details this shift in Tennessee from 1996 – 2003. During this period, appropriations for higher education increased 13 percent, while tuition and fees increased

102 percent.



The inevitable result of such funding instability is pressure to downsize and initiate retrenchment polices (Chabotar and Honan 1990). While the demand for higher education remains strong, governments are slashing their funds for higher education and the public is demanding stronger accountability for their tax dollars (Applebaum and Patton 2002). As other state entities are forced to downsize, higher education cannot expect to escape pruning; legislators, foundations, parents, and donors are demanding more of institutional leaders to downsize and increase productivity (Hollins 1992; Applebaum and Patton 2002). For many internal and external benefactors of higher education, etrenchment initiatives represent a rational response to increased costs associated with academe and decreased state appropriations (Leslie 1990).

Retrenchment policies are general centered on the goals of cost containment and resource reallocation. Such policies are driven by the realization that the "supermarket" model of offering every major, often of spectacularly varying quality, is slowly being replaced on many campuses by a more selective "boutique" model that concentrated on those majors that an institution can adequately support (Chabotar and Honan 1990). At their core, retrenchment decisions present institutions with an opportunity for mission re-examination and specificity. Discussions of protecting academic integrity and quality are often at the center of public debate. However, administrators rarely differentiate between the strategic goals of retrenchment and the tactical measures by which mission re-classification are actualized. Strategic issues are generally mission oriented and involve the coordination of the philosophic foundations of organizations. Because discussions of strategic issues are highly normative, they require considerable investments of time and administrative energy before implementation. Tactical issues are the specific measures through which retrenchment plans are operationalized. These issues are generally centered on the discussion of increased productivity through increased student faculty ratios and the termination of low producing programs. Generally, efficiencies in productivity do not equate to cost savings; resources produced are redirected towards existing departments and faculty to restructure the academic core of the institution.

One of the primary difficulties faced by academic administrators as they attempt to downsize is that the bulk of their institutional operating budgets are subsumed by personnel costs. Higher education is a labor intensive enterprise and any significant downsizing effort must eventually result in faculty downsizing. Discussions of departmental closures and faculty terminations occur in highly controversial and politicized environments. Institutions and states that engage in these activities must ensure that reduction and re-allocation fulfill two goals: the protection of the academic core and the protection of institutional integrity. Decision-makers must be mindful of the past and ensure that they do not fall victim to the political pressures of the future. Policymakers must ensure that campuses are allotted maximum fiscal and institutional autonomy during retrenchment. Campuses cannot be expected to engage in academic pruning if they do not first enjoy autonomy to identify targets and to return identified resources for internal reallocation. Experience has demonstrated that successful retrenchment initiatives are aimed at resources reallocation rather than cost savings and budgetary reversions (Mingle 1982).

In general, those institutions that engage in activities that strengthen a set of core programs to develop market niches are better able to recover from retrenchment periods than those that engage in enrollment growth to cover revenue loss (Leslie and Ramey 1986). While enrollment growth produces short-term revenue gains through student fees, such growth further taxes the physical and fiscal abilities of institutions to meet the diverse needs of a growing student population. Rather than thinning the soup, institutions can no longer expand indefinitely and expect an ever-increasing share of state and federal budgets (Slaughter 1993). "Given the political winds of the day, the institution that reduces enrollment in a well publicized quest for quality probably will gain a superior financial position over the colleges that continue to pursue quantity" (Leslie and Ramey 1986: p. 18-19).

RETRENCHMENT DECISIONS IN TENNESSEE

Through the utilization of case study methods (Yin 1984), this study examines the manner in which retrenchment decisions are made at the state and campus levels. This study focuses specifically on Tennessee, and examines the means through which policymakers in that state approached many of the fiscal difficulties presently affecting many states across the nation. The authors have also chosen to focus

on Tennessee because its fiscal difficulties are systemic and result from an inelastic tax structure that is unable to generate sufficient resources to meet the policy needs of the state. As noted in Boyd (2002) Tennessee will experience long-term financial difficulties as a result of its structural revenue problems. As a result of these revenue problems, the state's higher education system was forced in 2002-03 to make substantial cuts to personnel, academic programs, and services. Unlike many states that only have to adjust during weak economies, Tennessee had to realize that budget shortfalls were not temporary and could not be remedied with shallow, across-the-board cuts. Unlike other states that are just now beginning to experience downturns in state revenues, the fiscal difficulties in Tennessee have been present for almost a decade. Therefore, the series of policy steps undertaken in Tennessee may serve as a benchmark for retrenchment activities in other states that are presently facing systemic economic crises rather than cyclical downturns in the economy.

The decade of the 1990s was not kind to Tennessee higher education. The state faced a multiplicity of federal lawsuits and mandates in the areas of K-12 education, health care, prisons, and mental health. Additionally, the state was strangled by an outdated tax structure that relied heavily on a sales tax to fund general state government. The inelasticity of Tennessee's tax structure prevented many aspects of state government from fully serving their needs of their constituents, but especially unkind to higher education, who missed out on the golden boom that was experienced by many states in the 1990s (Callan 2002). As a result of limited tax revenues, higher education in Tennessee increasingly relied upon student fees to offset decreases in state appropriations. This policy direction, while well intentioned,

was short-sighted because of the limited discretionary income of the state's citizenry. Given that the median household income for Tennessee in 2000 was \$36,360, a great majority of the state's residents have been placed in a position in which access to college

Cost of Attendance Comparisons 2000									
State	Median Household Income	Tuition and Fees - 4 Year	Tuition and Fees - 2 year	Total Cost of Attendance - 4year					
Alabama	\$34,135	8.9%	5.0%	22.7%					
Arkansas	\$32,182	11.9%	3.2%	25.5%					
Georgia	\$42,433	7.6%	3.5%	19.2%					
Kentucky	\$33,672	9.8%	3.5%	22.9%					
Mississippi	\$31,330	9.9%	3.4%	23.2%					
North Carolina	\$39,184	7.0%	2.3%	20.0%					
South Carolina	\$37,082	10.1%	3.5%	23.6%					
Tennessee	\$36,360	10.1%	3.9%	22.8%					
Virginia	\$46,667	8.4%	2.5%	20.6%					

is unaffordable. As noted in *Measuring Up 2002*, approximately 22.8 percent of median household income is required to cover the total cost of college attendance.

Given the limited earnings capacity of the state's citizenry, many policymakers in Tennessee have begun to discourage higher education from relying so heavily on large-scale tuition increases to offset declining state appropriations. Even though additional state revenues for higher education are not available, the legislature has been under intense constituent pressure to control escalating college costs. This political pressure resulted in the implementation of legislatively mandated limits on tuition increases for 2002-03. While these "caps" were politically popular, they severely undermined the ability of higher education to avoid large scale cuts in that fiscal year by implementing offsetting fee increases.

The tuition debate in the legislature was closely linked to on-going budgetary discussion in both chambers regarding tax reform. For over three years, the legislature flirted with the implementation of a state income tax as a means to overcome structural inadequacies in the revenue structure of Tennessee state government. The inability of the legislature to reach an agreement on the income tax brought the state to a breakpoint in the summer of 2002. This breakpoint was reached during a legislative impasse in the early summer of 2002 and eventual government shutdown during early July of 2002. Unable to reach a settlement to the budgetary impasse, summer school classes were abbreviated, and higher education was left in a very unstable budget situation for the remainder of 2002-03. Complicating matters further, a five percent impoundment occurred in Spring 2003. Clearly, potential policy and structural changes for the academe were of paramount importance.

As a result, the Tennessee Higher Education Commission issued a revision to its 2000-05 Master Plan aimed at promoting a realistic response to the educational and fiscal challenges facing Tennessee. Given the austere funding situation, and the limited hope for additional investments in the foreseeable future, higher education could not continue to operate under the modus operandi of "business as usual." While the traditional goal of providing access for all Tennesseans remained constant, educators were mindful of their responsibility to provide the highest quality educational product to the taxpayers of Tennessee. The Plan of Action was centered upon balancing this tension, and worked to provide

assurances that institutions would continue to offer the highest quality education possible, while constantly seeking to operate efficiently and making the best use of technology.

The policy initiatives outlined in the *Plan of Action* were designed to encourage Tennessee colleges and universities to strategically position themselves to maintain the highest level of academic integrity and quality even though state support has been inadequate. While many of the proposals contained in the *Plan of Action* could have a short-term adverse impact on the traditional access goals of Tennessee higher education, it was the hope of the Commission that the examination of programs and services that would result could induce institutional mission reclassification and adjustment in which campuses would focus on specific areas of emphasis.

In an effort to answer the call to maintain a proper balance between access and quality, the Tennessee Higher Education Commission issues the *Plan of Action* in July of 2002. *The Plan of Action*, and the associated series of policy recommendations and proposals, aimed to identify significant dollars to be reallocated from discontinued programs and services. By design these savings could be applied to programs and services deemed of higher strategic need for the stateof Tennessee and/or those that were most in-line with institutional strengths and mission distinction. Given the labor-intensive nature of colleges and universities and the need to phaseout programs over time, savings for reallocation would be realized over a multi-year period. Through this redirection of resources, it was the hope of the Commission that the structural changes would produce a more distinctive and focused system of higher education whose campus reputations are derived less from enrollment size and more from imagination, creativity, and quality of programs.

The Plan of Action - Policy Recommendations at the State Level

In an effort to balance the needs of an undereducated populace, but with a careful realization that enrollment growth must be managed, the Commission proposed the establishment of enrollment ranges, i.e. caps, for public four year institutions. The Commission acknowledged that limitations on enrollment were contentious, but such limitations were driven by the desire to maintain the highest level of institutional quality given insufficient state support for public higher education. The Commission

recognized the threats to economic and social development of limiting access. However, given the probability of continued limitations in state support, coupled with projected enrollment growth that would further strain institutions, their staff reached the conclusion that such caps were inevitable.

Rather than capping overall enrollment levels, the THEC staff was charged to work cooperatively with the governing boards and institutions to construct an enrollment management policy that promoted access and institutional flexibility, but maximized the efficient use of scarce state resources. Many institutions, especially those of the Tennessee Board of Regents system, called for the Commission to adopt the concept of institutional right sizing. While the concept may be of merit, one of the potential dangers of moving to a right size scenario, given the present funding environment, is that it may lead to further formula inequality when additional state funds are actualized. The funding formula in Tennessee has historical served to articulate the true needs of public higher education, and has provided a source of equity in an unstable funding environment. While the formula has not been fully funded since 1986, it has ensured that all institutions are treated equally in the resource allocation process, whether or not new money was available. THEC staff argued that to allow institutions to grow uncontrollably would cause irreparable harm to the long-term stability of the funding for higher education in Tennessee.

The second policy recommendation, increasing admissions standards, was inherently linked to the desire of THEC to manage enrollment. The Commission recommended that during the 2002-03 academic year, universities should review and/or revise their admissions standards so that admissions requirements will promote and help insure student readiness for college level work. Institutions were expected to phase in revised admission requirements over the next three academic years consistent with he revised enrollment management policy detailed above. Additionally, these standards should be revised in conjunction with the ongoing efforts of the Tennessee P-16 Council to create a seamless educational system in Tennessee.

In another effort to redirect resources, the Commission approved significant changes to the state's long standing remedial and developmental education program. THEC staff recommended that state appropriations for remedial education be phased out immediately for the university sector effective with

the appropriations recommendations for 2003–2004 fiscal year. Additionally, the Commission recommended that state support for developmental education at the university level be reduced to \$150 per credit hour, which is comparable to current community college per-student funding rates. It was the intention of the Commission that this initiative would allow universities to continue to serve their mission specific access goals, but would provide a level of per-student support consistent with that of the community colleges.

Moving to academic programming, the Commission asserted its statutory responsibilities for new academic program approval, and systematically limited the development of new academic programming across the state. However, in an effort to return flexibility and discretion to the campuses, the Commission repeal ed their moratoria on new programming effective with the ratification of the *Plan of Action*. While the Commission encouraged programmatic innovation, it stressed that new program proposals must be tempered by economic and educational realities. Additionally, due to fiscal uncertainties and the educational needs of the state, the Commission clearly stated that it would grant primary attention to undergraduate programs and strongly discouraged further growth and proliferation of graduate and doctoral programs. Furthermore, the Commission, in cooperation with governing boards and institutions, undertook a review of existing academic programs, focusing light on high cost, and low producing programs. The end goal was program termination, with the expectation that institutions would retain savings from such action for deployment to more strategic needs (scholarships, program enhancement, faculty salaries, etc.).

In all, over 230 low-producing programs were identified by the Commission for campus review. Over the course of the Spring 2002 semester, each of the public institutions in the Tennessee Board of Regents and the University of Tennessee systems conducted internal reviews of the programs that were identified by the Commission. A myriad of quantitative and qualitative factors were utilized to assess program viability. Using data points such as accreditation information, program reviews, undergraduate credit production and graduation rates, 62 academic programs were identified at the campus level for phase-out and termination. The savings realized from this funding adjustment would be retained by the

institution and become available for documented redirection towards the academic core, faculty salary improvements, or other institutional priorities.

While the recommendations detailed above were met with vigilant opposition, the outcry was tepid compared to the criticism created by the Commission's recommendation to phase out state support for athletic programs. In an act of bravery, or shear futility, the Commission openly questioned the merit of subsidizing intercollegiate athletics with state appropriated funds. The Commission argued that a a time in which institutions were forced to trim payrolls and increase class sizes, the decision to subsidize athletics should be revisited. While this decision was met with quiet support by the faculty, the political opposition was immeasurable. As a result, this recommendation was ultimately diminished in scope. As a compromise to the original policy which called for the total diminution of state support, a taskforce was created and charged with identifying all athletic expenditures and offering proposals for significantly reducing the state subsidy for athletics. In the interim, the *Plan of Action* capped state education and general operating support for athletics at an amount comparable to 2001-02 actual expenditure levels, accommodating increased scholarship costs resulting from 2002-03 fee increases. Additionally, THEC charged each institution with the responsibility of annual disclosure of its spending choices regarding NCAA athletics.

TENNESSEE HIGHER EDUCATION COMMISSION ANALYSIS OF ATHLETIC GENERAL FUND SUPPORT										
Institution	Fis	cal Year 1998-99		Fiscal	Year 1999-200	0	Fiscal Year 2000-01			
		Athletic			Athletic		Athletic			
	Total	General Fund		Total	General Fund		Total	General Fund		
	E&G	Support	Percentage	E&G	Support	Percentage	E&G	Support	Percentag	
Austin Peay	\$45,309,440	\$1,749,537	3.9%	\$47,126,448	\$2,104,333	4.5%	\$50,046,100	\$1,859,549	3.7%	
East Tennessee	83,580,420	2,341,684	2.8%	86,182,877	2,401,072	2.8%	90,122,900	2,780,300	3.1%	
Middle Tennessee	124,381,413	2,758,705	2.2%	129,516,836	4,130,761	3.2%	143,859,200	4,856,000	3.4%	
Tennessee State	71,812,608	2,448,666	3.4%	72,114,096	2,663,370	3.7%	83,837,200	3,467,380	4.1%	
Tennessee Tech	63,948,010	2,291,682	3.6%	63,156,748	2,600,880	4.1%	67,487,000	2,803,170	4.2%	
University of Memphis	174,710,016	2,401,003	1.4%	184,441,983	2,179,664	1.2%	200,976,100	3,763,386	1.9%	
Subtotal TBR	\$563,741,907	\$13,991,277	2.5%	\$582,538,988	\$16,080,080	2.8%	\$636,328,500	\$19,529,785	3.1%	
Chattanooga	\$29,988,279	\$154,515	0.5%	\$30,122,562	\$162,223	0.5%	\$32,497,500	\$150,000	0.5%	
Cleveland	11,933,638	133,213	1.1%	12,119,425	150,585	1.2%	13,506,100	130,129	1.0%	
Columbia	15,360,077	171,300	1.1%	15,529,538	180,132	1.2%	17,713,300	141,000	0.8%	
Dyersburg	8,260,213	129,457	1.6%	8,266,481	145,731	1.8%	9,034,900	79,300	0.9%	
Jackson	14,091,945	148,663	1.1%	14,417,954	155,263	1.1%	16,023,500	135,000	0.8%	
Motlow	11,568,813	134,512	1.2%	12,007,729	134,721	1.1%	12,939,600	118,500	0.9%	
Roane	20,938,075	147,713	0.7%	21,978,258	164,188	0.7%	24,018,800	115,500	0.5%	
Southwest	49,445,082	199,106	0.4%	48,480,481	247,143	0.5%	53,082,700	195,000	0.4%	
Volunteer	21,200,043	196,437	0.9%	21,811,100	186,868	0.9%	25,188,500	150,000	0.6%	
Walters	21,090,012	162,404	0.8%	21,624,894	175,180	0.8%	23,874,500	147,400	0.6%	
Subtotal 2-Year	\$203,876,177	\$1,577,320	0.8%	\$206,358,422	\$1,702,034	0.8%	\$227,879,400	\$1,361,829	0.6%	
UT Chattanooga	\$63,639,857	\$2,835,571	4.5%	\$65,999,307	\$2,634,598	4.0%	\$68,614,312	\$2,623,950	3.8%	
UT Martin	43,834,157	1,811,706	4.1%	45,197,374	1,825,251	4.0%	47,448,719	1,953,434	4.1%	
Subtotal UT	\$107,474,014	\$4,647,277	4.3%	\$111,196,681	\$4,459,849	4.0%	\$116,063,031	\$4,577,384	3.9%	
Total	\$875.092.098	\$20.215.874	2.3%	\$900.094.091	\$22,241,963	25%	\$980.270.931	\$25,468,998	2.6%	

In their final major element of the plan, the Commission created a taskforce to revise the funding formula that has supported Tennessee higher education for over two decades. Although the formula ensured that all institutions were treated equitably in funding decisions, many of its central principles were outdated and in need of revision. In this revision of the formula, the Commission staff was charged to examine the formula's primary reliance on enrollment, the development of new funding peers, and the possibility of creating "mission enhancement" features that recognize and strengthen the development of distinctive missions for each campus and that recognize campus performance in meeting state goals such as improved persistence and graduation rates. A recommendation on formula revision will be brought to the Commission no later than the July 2003 Commission meeting.

Campus Reaction to the Plan of Action

In a twist of irony and just prior to its spring 2002 release of *Plan of Action*, the Tennessee Higher Education Commission released data that showed an increase of approximately 4,000 more high school graduates in Tennessee by the year 2006. This projected increase in demand for access to post-secondary education arrived during a time of decreasing state resources available for public postsecondary education, increasing calls for public accountability of higher education, and increasing tuition and fees. The need for affordable access served as a critical public agenda goal during the discussions surrounding the *Plan of Action*. This discussion was articulated in media outlets, public forums, and in the halls of the state legislature. As previously noted, the 2002 legislative session was extremely contentious, torn by debates over revenue bills, tax reforms, and struggles to fund general state government. Elected officials lamented the impact of appropriations reductions on access and called for higher education to control fees in an effort to ensure access. For the first time in Tennessee, the legislature placed a maximum limit on fee increases during the 2002-03 academic year.

As a result, the higher education community finds itself in the position of struggling between the goals of increased access and commitment to quality. While the legislature limited fee increases, they also asked higher education to absorb a nine percent reduction in overall operating expenses for the 2003-04 academic year. The overall budgetary reduction was in excess of \$100 million, which represented

almost ten percent of total appropriations for higher education. These reductions had significant and permanent impacts on institutions across the state. The following provides an overview of the reaction of Austin Peay State University to these reductions and the Commission's *Plan of Action*.

While recognizing the struggle to balance quality and access during a time of severe fiscal constraints, Austin Peay State University agreed in the spring of 2002 with the notion of responsible growth put forth by THEC but felt that institutional autonomy and regional economic development was (and will continue to be) threatened by the "one size fits all" approach to managing enrollment and budget growth. Austin Peay State University was not alone in its defense of campus autonomy in decisions of retrenchment and/or efficiency. All of the four-year and two-year campuses in the Tennessee Board of Regents system offered alternative plans for cost-cutting measures and methods for streamlining operations. Tough budget decisions are about setting priorities (as THEC so aptly described in its *Plan of Action*) but those priorities should be largely set by the campuses within reasonable state-level funding parameters.

The long-term goal for the Tennessee Higher Education Commission was to influence and control the state's higher education budget growth. APSU challenged that this goal was attainable but did not have to have as its casualty access to higher education, or a decline in workforce and economic development. Short-term and long-term strategies were presented to account for several scenarios of state funding levels and tuition increases. Several assumptions were made by the leadership of APSU as these plans were drawn. Assuming that no additional facilities would be available and state funding per FTE would either remain flat or decline, Austin Peay's capacity for change and growth is influenced by:

- Projected growth in overall population and in high school graduates in the northern middle Tennessee region
- · Capacity based current faculty/student ratios and facilities utilization
- · Current participation rates in counties served
- Extenuating factors such as the impact of Fort Campbell on enrollment patterns
- · Commitment to increasing use of adjunct faculty while maintaining quality instruction
- Commitment to using existing faculty resources in a more efficient manner (i.e. slight increase in student-faculty ratio)

· Availability of increased tuition revenues as a result of any enrollment growth

From APSU's perspective, the high school graduate projections produced by THEC merely scratched the surface of potential participants in various levels of postsecondary education and training in the north central region of Tennessee and southern Kentucky. Several layers of information reveal these pressures for growth to be very real. Relative to the other 94 counties in Tennessee, Montgomery (where APSU is located) has a very young population. Enrollment in the K-12 system represents 21.0 percent of the population of Montgomery County compared to the state average of 18.2 percent. Analysis of the county's rate of natural population growth (comparison of birth and death rates) reveal that between 1990 and 1998 Montgomery was growing by this statistic at 12.4 percent while the statewide average was only 4.1 percent. Montgomery also is disproportionately represented by those ages 1844. Of its overall population, 18-44 year old citizens represent 46.8 percent in Montgomery compared to the statewide average of 40.6 percent. Many of those in this age bracket have been a part of the boom in domestic migration that Montgomery County and the counties around Nashville in middle Tennessee have experienced. Between 1990 and 1998, the local rate of domestic migration was 16.7 percent in Montgomery County compared to the relatively high state average of 6.9 percent. Demographers with the Census Bureau projected Montgomery County to grow 63.1 percent between 1997 and 2020. This level of growth is well above the state of Tennessee's projection that stands at a healthy 22.8 percent. Every service or program delivered by local and state government is going to be challenged to keep up with this continued growth in northern Middle Tennessee. Therefore, Austin Peay State University, Montgomery County and the surrounding areas are not just faced with challenges brought by the "baby boom echo" as described in the high school graduates data released by THEC, but it also has the added pressures of an increased population due to domestic migration and a relatively young population as evidenced in those ages 18-44.

Short-term and Long-term Strategies to Manage Quality and Access

Faced with the possible scenario of a 10 percent state-level budget cut to higher education for 2002-03 and an almost certain scenario where many of the directives of THEC would be

enacted, APSU conducted a thorough review of all programs and services (including all academic and non-academic units regardless of funding stream). If the budget cuts discussed by the legislature in spring 2003 were actualized, APSU and its sister institutions would face significant retrenchment decisions and achievement of efficiencies would not be enough to balance the budget even with moderate to large fee increases. To prepare for this worst-case scenario, campus leaders worked toward objective criteria for determined personnel decisions. The following is a list of the criteria employed to develop a list of faculty positions that were at risk under the worst-case, budget scenario. It should be noted that this list was developed through cooperation of the President, VP of Academic Affairs, Deans, and Chairs at APSU:

- 1. Student credit hour (SCH) production with consideration to level of instruction
 - a. Three year trends in SCH production
 - b. Student-faculty ratios at lower, upper, and graduate levels
 - c. Student-faculty ratio targets within the THEC funding formula
- 2. Accreditation requirements
- 3. Availability of adjuncts with the region
- 4. Affirmative action decisions
- 5. Special consideration (not in ranked order)
 - a. Programs with only one full-time faculty member
 - b. Discipline specialty included in graduation requirements
 - c. Faculty with full-time, temporary experience in the department
 - d. Years of service in higher education faculty positions
 - e. Rank of faculty
 - f. Faculty reassignments to fill critical positions

Under the worst-case state budget scenario, plus a projected 15 percent tuition increase, it was determined internally that approximately 30-35 faculty and staff positions would have to be eliminated. Among these were seven regular faculty positions (all held by first year faculty), seven temporary faculty positions, and approximately 20 professional and staff positions across all areas of the university. Though it should be noted that the regular, full-time faculty positions were later protected by developments in the state appropriations bill, many of the professional and staff positions identified were eliminated and responsibilities divided among existing offices and personnel. The commitment was made to attempt to

place those staff whose jobs had been eliminated into open positions that had been determined to be critical to the university.

Though not as critical to short-term activities of the campus, Austin Peay was also faced with identifying alternatives to the *Plan of Action* and making a case for internal efficiencies that could meet the spirit of the cost controls inherent with the plan. One of the main challenges to the THEC plan was that access did not have to be sacrificed in place of quality. The diminution of access goals was not palatable for many in the APSU community. APSU has historically been the institution of choice for many minority, veterans of the armed services, and non-traditional students. As a result of their commitment to long-standing access values, APSU worked diligently to craft a strategy that promoted access, yet protected quality. The APSU leadership team determined that calculating capacity based on current student-faculty ratios, availability of adjunct instructors, and decreased release time to existing faculty was more relevant to operations than one-size-fits-all caps on enrollment.

Although an institution's mission and other factors may affect its student-faculty ratio targets, a review of current ratios indicates that some institutions have additional capacity without increasing costs. While APSU and other institutions have historically ried to maintain low student-faculty ratios and have become known for this attribute, in these tight fiscal times consideration should be given to at least nominal increases. This would retain or increase access without being detrimental to the quality of instruction. An increase of the student-faculty ratio at APSU from 17.7 to 20.2 would increase capacity by 815 FTE. Additional emphasis can also be placed on increasing the use of adjunct faculty on the APSU campus. Assuming a 20.2 student-faculty ratio, 30 additional adjunct FTE faculty would increase capacity by another 606 FTE. The cost of an additional adjunct instructor can be funded well within the tuition revenue generated by a 3 hour course with 20 students.

The practice of release time for existing full-time faculty could also be curtailed to decrease that total by 10 faculty FTE. These 10 faculty FTE could produce another 202 FTE

without taking on any additional expenses. Considered together these three steps — an increase to student-faculty ratio, increased use of adjunct faculty, and decreased release time for existing faculty — could increase capacity by 1,623 FTE by 2007 with increased demands on services met through increases in tuition and fee revenue rather than increases in state appropriations.

Gaps Between Campus and State Goals

The future increase of high school graduates in Tennessee should be of concern to anyone participating in the fiscal debate in the state's capital. Those areas of the state (like APSU's home community of Clarksville) where an increasing 25-44 year old population compounds the problem of an increasing number of high school graduates are going to see participation in higher education continue to rise in the next decade. However, this growth coupled with the continuing decline in available state funding per student is troubling and has to be creatively dealt with to avoid in impacts on quality of instruction. Increased tuition and fees have held campus budgets together for the last few years. From 1993 to 2001, revenue from tuition and fees increased 72 percent in Tennessee while revenue from state appropriations increased 27 percent. According to data from the Southern Region Education Board, state appropriations for higher education increased by 14.9 percent in Tennessee from 1995 to 2001 - the lowest figure among all 16 SREB states. West Virginia was next lowest at 18.4 percent and Alabama next at 21.1 percent. On the other end of the list are Kentucky (47.9 percent), Louisiana (48.2), Florida (54.5), and Virginia (66.1). Like their counterparts at other four-year institutions in Tennessee, APSU students came to campus and immediately had an additional 15 percent fee increase. Unless the state of Tennessee makes more commitment to higher education, the only recourse that all campuses have is continued reliance upon tuition and fees for improvement dollars.

One defense of statewide enrollment management initiatives cites the benefit of handling the influx of high school graduates in Tennessee by channeling students into community colleges for the first two years of their education and then encouraging them to finish at Tennessee's four-year schools. If the state chose to cap enrollments at current levels or even to reduce them by a percentage, then students at various points will be forced to pursue education and training in the two-year college sector. Compelling

arguments can be made in favor of this move. Prominent among them is the assertion that, in times of fiscal decline, quality is sacrificed when access continues to be a priority. It follows that the "pie" is only so large and can only be cut into a limited number of pieces. Many would say that the state has to serve its current students well before it can serve more students.

Opponents contend that there will be serious drawbacks to forcing more students into the two-year sector. Educational attainment levels, participation rates, and retention rates will all be subject to decline rather than getting better. While the two-year sector is able to provide an affordable access point for students, it is an environment that does not possess the same level of student development services and support networks that are found in a four-year setting. Opponents note that several barriers are presented that handicap students upon entrance to community colleges: high levels of attrition, difficulty in transferring to four-year schools, and high levels of attrition after transfer. If the move is made to steer more students toward the two-year sector, much more of a commitment must be made by the state to encourage and provide assistance for students moving through the postsecondary education system. Otherwise, the cracks that students fall through at the current time could become wider.

CONCLUSIONS

Resource allocation decisions have dominated higher education planning since the 1980's. With fiscal constraints and heightened demands displaying a near universal force, many countries in addition to the United States have felt the challenge to strike a balance between strategic retrenchment and growth (Acherman, 1988; Frackmann, 1988). Because of the high percentage of higher education expenditures devoted to personnel costs, this human resource dependent enterprise has few options available in times of state-level fiscal decline that do not cut to the heart of core operations. These decisions become even more difficult when political dynamics come to the fore and resource allocation becomes a battle between sub-units within a larger organizational structure (Pfeffer & Salancik, 1974; Ashar & Shapiro, 1990). Legislative bodies, executive branch officials, system leadership, university executive teams, and powerful interests within a given university all become combative over issues surrounding what might be eligible for elimination or redistribution.

American higher education has traditionally prided itself on the goal of providing universal access to all students. While this goal remains of paramount importance, colleges and universities must begin to strategically re-examine their mission and operating premises if they are to remain viable. In this era of post-massification, we are beginning to see a new managerial approach, one in which higher education invests in areas that will thrive in future markets. With little prospect of future revenue growth from traditional sources such as state appropriations, higher education must re-examine the panoply of programs, services, and operations to identify revenues for reallocation. Unless higher education is able to come to grips with exponential program growth and tuition, it may fall victim to the same federal pressure that has been placed on the health care industry. Unless higher education can contain costs and protect quality, it will continue to suffer a bss of public trust and will increasingly fall under the manipulative watch of legislative and executive officials. Furthermore, the decades of shifting the funding responsibility away from state appropriations and towards students' resources have not been the result of a well planned or thoughtful policy discourse. Given the critical role that higher education plays as a facilitator of human capital development, policymakers must remain reticent to the diverse needs of all students requesting access to post-secondary education. Unless careful and deliberative measures are taken to protect affordability, higher education may become nothing more than an unaffordable and unrealistic dream for many Americans.

REFERENCES

Acherman, H.A. (1988). "Selective retrenchment and growth in the Netherlands." <u>International Journal of Institutional Management in Higher Education</u>, 12, 1, 41-48.

Applebaum, S.H. and Patton, E. (2002). "Downsizing the university: Bonne chance!" <u>The International Journal of Education Management.</u> 16, 3, pp. 126-136.

Ashar, H. and Shapiro, J.Z. (1990). "Are retrenchment decisions rational?: The role of information in times of budgetary stress." <u>Journal of Higher Education</u>, 61, 2, 121-141.

Bonser, C.F., McGregor, Jr., E.B., & Oster, Jr., C.V. (1996). <u>Policy Choices and Public Action.</u> New Jersey: Prentice-Hall.

Bogue, E.G and J. Aper. (2000). <u>Exploring the heritage of American higher education</u>. Phoenix, AZ: ACE/Orynx Press.

Boyd, D.J. (2002). State <u>Spending for Higher Education in the Coming Decade</u> Prepared for the National Center for Higher Education Management Systems. Denver, CO.

Boyd, D.J. (2003). "The bursting state fiscal bubble and state Medicaid budgets." Health Affairs. 22, 1, 46-61.

Callan, P.M. (2002). <u>Losing Ground: A National Status Report on the Affordability of American Higher Education.</u> The National Center for Public Policy and Higher Education. San Jose, CA.

Callan, P.M. (2002). <u>Coping with Recession: Public Policy, Economic Downturns and Higher Education.</u> The National Center for Public Policy and Higher Education. San Jose, CA

Cameron, K. (1983). "Strategic responses to conditions of decline: Higher education and the private sector." <u>Journal of Higher Education</u>. 54, 4, 359-380.

Chabotar, K.J. and Honan, J. (1990). "Coping with retrenchment." Change (4) pp 28-36.

Conklin, K.D. (2002). "After the tipping point: A new first principle for state postsecondary education finance." *Change* (2) pp 25-29.

Davis, H.D., Noland, B.E. and McDonald, N. (2001). "The Impact of Financial Aid on College Participation: Meeting the Needs of the Under-served" The Journal of College Orientation and Transition. 2001, 3.

Frackmann, E. (1988). "Steering under conditions of retrenchment in higher education: The British experiences from a German perspective." <u>International Journal of Institutional Management in Higher Education</u>, 12, 1, 27-40.

Gove, S.K. (1971). "The politics of higher education." In New Perspectives in State and Local Politics. Edited by J.A. Reidel. Waltham, MA: Xerox College Publishing.

Graham, H.D. (1989). "Structure and governance in American higher education: Historical and comparative analysis in state policy." <u>Journal of Policy History</u>, <u>1</u>.

Gumport, P.J., Iannozzi, M., Shaman, S. and Zemsky, R. (1997). <u>Trends in Higher Education from Massification to Post-massification</u>. National Center for Postsecondary Improvement. Stanford, CA.

Heller, D.E. (1997). "Student price response in higher education: An update to Leslie and Brinkman." Journal of Higher Education. 68, 624-659.

Hollins, C.S. (1992). "Where do we go from here?" <u>New Directions for Institutional Research</u>. No. 75, Fall.

Hovey, H.A. (1999). <u>State Spending for Higher Education in the Next Decade: The Battle to Sustain Current Support</u>. San Jose: The National Center for Public Policy and Higher Education.

Leslie, L.L. and Brinkman, P. (1988). The Economic Value of Higher Education. New York, McMillan.

Leslie, L. and Ramey G. 1986. "State appropriations and enrollments: Does enrollment growth still pay?" <u>Journal of Higher Education</u>. 57(1) pp. 1-19.

Lindbloom, C. 1959. "The science of muddling through." Public Administration Review, 19(2), 79-88

Marcus, L.R. (1997). "Restructuring state higher education governance patterns." <u>The Review of Higher Education</u>, 20, 4, 399-418.

McGuinness, Jr., A.C. (1997). "A complex relationship: State coordination and governance of higher education." National CrossTalk, Fall.

Millett, J.D. (1984). <u>Conflict in Higher Education: State Governance Coordination Versus Institutional Independence.</u> San Francisco: Jossey-Bass Publishers.

Mills, M. (1999). "Stories of excellence and enterprise in higher education policy making: A narrative analysis of the reports of blue ribbon commissions on higher education." Paper presented at <u>Annual Meeting of Association for the Study of Higher Education (ASHE)</u>, San Antonio, November 21-23.

Mingle, J. (1982). <u>Redirecting higher education in a time of budget reduction: Issues in higher education.</u> Southern Regional Education Board Report Series. Atlanta: SREB Publications.

Moos, M. & Rourke, F.E. (1959). The Campus and the State. Baltimore: The Johns Hopkins Press.

National Center for Education Statistics. 2002. <u>The Condition of Education</u>. U.S Department of Education. Washington, D.C.

Peterson, M.W. (1985). "Emerging developments in postsecondary organization theory and research: Fragmentation or integration." <u>Educational Researcher</u>, 14, 3.

Pfeffer, J. & Salancik, G.R. (1974). "Organizational decision making as a political process: The case of a university budget." <u>Adminstrative Science Quarterly</u>, 19, 2, 135-151.

Raths, D. (1991). "Oregon's 'artificial depression': A case study in cost cutting." Change, 23, 6, 44-49.

Wood, J.L. & Valenzuela, L.T. (1996). "The crisis of American higher education." Thought and Action, 12, 2, 59-71.